

# NEWSLETTER

January 2026



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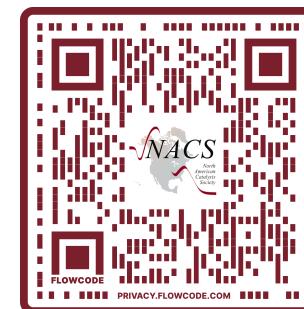
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# Letter from the President

## National Officers

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**Southeast - SECS:** Andreas Heyden

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**Tri-State - TSCS:** Nick Brunelli

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Eranda Nikolla (University of Michigan)

Umit S. Ozkan (The Ohio State University)

Ya-Huei (Cathy) Chin (University of Toronto)

Enrique Iglesia (Purdue University)

Randall Meyer (ExxonMobil Research & Engineering)

## Past President

Jingguang Chen (Columbia University)



Dear Members of the North American Catalysis Society,

As we begin a new year, I would like to extend my warmest greetings to each of you and to thank you for your continued engagement with the North American Catalysis Society (NACS). Our community remains vibrant, innovative, and impactful, and it is a privilege to serve as your President during this exciting time for catalysis research and practice.

The past year highlighted once again the central role that catalysis plays in addressing global challenges—from sustainable energy and chemical manufacturing to environmental protection and emerging technologies. The scientific creativity and dedication demonstrated by our members across academia, industry, and national laboratories continue to advance our field and strengthen its relevance to society at large. NACS is proud to serve as a platform that brings these diverse perspectives together.

Looking ahead, the coming year offers many opportunities for connection and collaboration. Our re-launching

of the NACS newsletter will emphasize important events, news, and information for our society. We remain committed to supporting early-career researchers, promoting diversity and inclusion within our community, and enhancing engagement between fundamental research and industrial application.

I also want to acknowledge the tremendous efforts of our board members, committee members, and officers. Their dedication is essential to the success of NACS, and I am deeply grateful for the time and energy they contribute. If you are interested in becoming more involved in Society activities, I encourage you to reach out—your ideas and participation are always welcome.

As we start this new year, I invite you to stay engaged with NACS, share your work, attend our events, and help shape the future of catalysis in North America and beyond. Together, we can continue to strengthen our community and expand the impact of our science.

I wish you a productive, healthy, and inspiring year ahead.

**Javier Guzman**

President, North American Catalysis Society

## David West is the recipient of the 2026 F. G. Ciapetta Lectureship in Catalysis

I am pleased to announce that David West of SABIC is the recipient of the 2026 F. G. Ciapetta Lectureship in Catalysis. The award is administered by the North American Catalysis Society and sponsored by the W. R. Grace & Co. It is to be awarded biennially in even-numbered years. The award consists of a plaque and an honorarium of \$5,000. The recipient may be invited to lecture at some of the local catalysis clubs during the two-year period covered by this award.

David is a Corporate Fellow at SABIC Technology and Innovation since 2012. Before joining SABIC, he worked at Dow for 31 years. While at SABIC he has focused mostly on the development of advanced technology for hydrocarbon pyrolysis, and catalysis and reactor technology for oxidative coupling of methane (OCM). Over the last decade, he pioneered multiple breakthrough projects for conversion of methane to ethylene (autothermal oxidative coupling of methane, a scalable reactor for combustion pyrolysis of methane and conversion of complex hydrocarbons to olefins). Under his leadership, the organization developed five new technologies and products that were graduated to the Strategic Business Units: thermoplastic composites, dielectric film, mixed plastic waste pyrolysis, hydrocracking of butane to ethylene/propene, and controlled release fertilizer. The first three are commercial; the third is complete and ready for deployment, the last is still in development. His pioneering contributions lie at the intersection of the disciplines of catalysis and reaction engineering. He is co-inventor on 68 granted patents including more than 50 in the area of OCM. He is a fellow of the AIChE and member of the U.S. National Academy of Engineering.

Congratulations!

Javier Guzman

President, North American Catalysis Society

**Read More:** <https://nacatsoc.org/>



## Michele Sarazen receives the 2025 ACS Early Career Award



At the Fall 2025 ACS meeting in Washington, D.C., Professor Michele Sarazen of Princeton University was recognized as the 2025 recipient of the ACS Early Career Award in Catalysis. This award acknowledges the creativity, impact, and service in the early stages of the recipient's independent career in the field of catalysis.

As exemplified by her presentation at ACS titled "(poly)alkene reactions in zeolites: moving forward in the face of microscopic reversibility", Prof. Sarazen's contributions tackle both fundamental and applied challenges in catalysis science and active site engineering for diverse catalytic processes. Beyond research excellence, this award celebrates her commitment to building and strengthening the network of catalysis researchers, ranging from students to faculty collaborators to industry partners, based on her years of service to the catalysis community.

**Read More:** <https://nacatsoc.org/>

## Awards Presented by the North American Catalysis Society

The North American Catalysis Society (NACS) sponsors six prestigious awards and lectureships to recognize the accomplishments of catalysis scientists, technologists, and engineers and to promote the advancement of catalysis science and technology in North America and worldwide. See below for specific information about each award.

Three of these awards include plenary lectures at NACS biennial meetings (Eugene J. Houdry Award in Applied Catalysis, Paul H. Emmett Award in Fundamental Catalysis, and Michel Boudart Award for the Advancement of Catalysis, the latter jointly presented with the European Federation of Catalysis Societies and NACS). The F. G. Ciapetta and Robert Burwell Lectureships in Catalysis involve lectures at local club/society meetings and the presentation of the awards at the NACS meeting banquet. The NACS Award for Distinguished Service in the Advancement of Catalysis is the most recent recognition instituted by the Society. Each of these awards is presented at a NACS meeting. Nomination deadlines are listed on the NACS website; each award has a separate deadline.

### Canvassing and Nomination Processes

NACS encourages all nominations for these awards. Nominators and nominees need not be NACS members. The President of NACS instructs the Vice President of NACS to form a canvassing committee for each cycle of each award to ensure a full slate of outstanding candidates. This committee for each award consists of recognized experts within the catalysis community at-large, and the committee mem-

bership is varied to ensure representation of a broad spectrum of the community and to include people from underrepresented groups. The committee identifies worthy candidates, and, together with the Vice President, seeks nominators for each candidate but provides no specific guidance about the preparation of nomination packages beyond that provided on the NACS website. The Vice President also instructs the Secretary of NACS to be in contact with representatives of each of the local NACS clubs/societies to request that they canvass for nominations within their local sections. All nomination cycles and deadlines for nominations are announced in the quarterly NACS newsletter and posted on the NACS website. The deadlines are strictly followed.

### Award Recipient Nomination Process

The jury that selects each NACS award recipient consists of scientists, engineers, and technologists recognized as experts and representing industry, academia, and national laboratories. The selection jury is appointed by the NACS President, who seeks guidance in selecting its members from the Vice President and from senior members of the catalysis community. The identities of the jury members are kept in the strictest confidence and known only to the President. The members of each jury must have no affiliation with any of the nominees, and all jurors are specifically asked to disclose any conflicts of interest and to disqualify themselves without prejudice when a conflict exists. The members of the jury are not known to each other. Their communications with regard to nominations are with the NACS President only and are required to be kept

strictly confidential.

The NACS President provides the jury with the nomination packages for all candidates within two weeks of the nomination deadline; in the intervening time, potential jury members are asked about their willingness to serve. The NACS President provides guidance to jury members about how to present their rankings of nominees. The members of the jury rank the candidates and provide specific details for their selections for their top three candidates. In some cases, jury members may be asked to again rank the top two candidates side-by-side, after considering their respective nomination packages once again.

The recipient of each NACS Award and the nominator of the award recipient will be informed by the President of NACS of the decision of the jury, followed by the President's notification of jury members and of nominators of each of the other candidates.

A formal announcement, composed by the President of NACS in consultation with the recipient and the nominator of the recipient, is published on the NACS website and in the NACS newsletter and may be submitted to other venues for announcement. Each award is presented at the biennial NACS meeting, where the respective citations are read and each award winner receives a plaque.

Procedures for evaluation of nominations for the Boudart Award are broadly consistent with the procedures stated above for NACS awards, but the procedures are determined jointly by NACS and the European Federation of Catalysis Societies.

### Award Deadlines

Service	15 May 2026
Houdry	17 Jul. 2026
Emmett	18 Sept. 2026
Boudart	6 Nov. 2026
Ciapetta	7 Nov. 2027
Burwell	25 Jan. 2027

See more details: <https://nacatsoc.org/awards/>

## Previous Winners of the North American Catalysis Society Awards

### Michel Boudart Award for the Advancement of Catalysis

2007 Alexis T. Bell  
 2009 Avelino Corma Canos  
 2011 James A. Dumesic  
 2013 Jens Nørskov  
 2015 Hajo Freund  
 2017 Bruce Gates  
 2019 Enrique Iglesia  
 2021 Graham Hutchings  
 2023 Johannes Lercher  
 2025 Bert Weckhuysen

### Robert Burwell Lectureship in Catalysis

1983 Robert L. Burwell  
 1985 Wolfgang M. H. Sachtler  
 1987 John B. Peri  
 1989 Jack H. Lunsford  
 1991 Kamil Klier  
 1993 Werner O. Haag  
 1995 Gary Haller  
 1997 Wayne Goodman  
 1999 Harold Kung  
 2001 Tobin Marks  
 2003 Alexis T. Bell  
 2005 Enrique Iglesia  
 2007 James Dumesic  
 2009 Bruce Gates  
 2011 Johannes A. Lercher  
 2013 Charles Campbell  
 2015 Matt Neurock  
 2017 Jingguang Chen  
 2019 Abhaya Datye  
 2021 Manos Mavrikakis  
 2023 Umit Ozkan  
 2025 Yong Wang

### F. G. Ciapetta Lectureship in Catalysis

1967 Jan H. deBoer  
 1968 John Sinfelt  
 1969 Stanislav Teichner  
 1972 George C.A. Schuit  
 1973 Jose J. Fripiat  
 1974 Dennis A. Dowden  
 1975 Pierre C. Gravelle  
 1976 Gerhard Ertl  
 1977 John R. Anderson  
 1986 Michel Boudart  
 1988 James D. Idol  
 1990 W. Keith Hall  
 1992 R. van Santen  
 1994 John J. Rooney  
 1996 George Kokotailo  
 1998 Avelino Corma  
 2000 Gary McVicker  
 2002 John Monnier  
 2004 Douglas Stephan  
 2006 Stuart Soled  
 2008 Robert Farrauto  
 2010 Jeffrey T. Miller  
 2012 Thomas Degnan  
 2014 Paul Barger  
 2016 Ahmad Moini  
 2018 Teh Ho  
 2020 Cong-Yan Chen  
 2022 Sourav Sengupta  
 2024 Aleksey Yezerets  
 2026 David West

### Paul H. Emmett Award in Fundamental Catalysis

1971 Richard J. Kokes  
 1973 John H. Sinfelt  
 1975 Jack H. Lunsford  
 1977 Gabor A. Somorjai  
 1979 Gerhard Ertl  
 1981 Peter A. Jacobs  
 1983 Robert J. Madix  
 1985 Alexis T. Bell  
 1987 M. Albert Vannice  
 1989 James A. Dumesic  
 1991 Harold Kung  
 1993 Mark Barteau  
 1995 Mark Davis  
 1997 Enrique Iglesia  
 1999 Raymond Gorte  
 2001 Donna Blackmond  
 2003 Francisco Zaera  
 2005 Matthew Neurock  
 2007 Robert J. Davis  
 2009 Manos Mavrikakis  
 2011 Bert Weckhuysen  
 2013 Christopher W. Jones  
 2015 Christophe COPÉRET  
 2017 Suljo Linic  
 2019 Javier Pérez-Ramírez  
 2021 Thomas Jaramillo  
 2022 Beatriz Roldan Cuenya  
 2023–2024 Aditya Bhan  
 2023–2024 Yuriy Román-Leshkov  
 2025–2026 Phillip Christopher  
 2025–2026 David Flaherty

### Eugene J. Houdry Award in Applied Catalysis

1971 Herman S. Bloch  
 1973 Charles J. Plank  
 1975 Heinz Heinemann  
 1977 Vladimir Haensel  
 1979 Adalbert Farkas  
 1981 Herman Pines  
 1983 Milton Orchin  
 1985 John W. Ward  
 1987 Ralph J. Bertolacini  
 1989 Jule A. Rabo  
 1991 James Roth  
 1993 Wolfgang M. H. Sachtler  
 1995 Madan Bhasin  
 1997 John Armor  
 1999 Clarence Chang  
 2001 Leo Manzer  
 2003 Avelino Corma  
 2005 Henrik Topsøe  
 2007 Stacey Zones  
 2009 Jeffrey Beck  
 2011 James C. Stevens  
 2013 Giuseppe Bellussi  
 2015 Anne Gaffney  
 2017 Jeffery Bricker  
 2019 Hai-Ying Chen  
 2021 Deng-Yang (DY) Jan  
 2023 Stephen R. Schmidt  
 2025 José G. Santiesteban

### NACS Award for Distinguished Service in the Advancement of Catalysis

2010 W. Nicholas Delgass  
 2012 John Armor  
 2014 Burtron H. Davis  
 2016 Gary L. Haller  
 2018 Alexis T. Bell  
 2021 Enrique Iglesia  
 2023 Stuart Soled  
 2025 Bruce Gates

## 2026 Southeastern Catalysis Society Annual Symposium



The 2026 SECS Annual Symposium will be held in Blacksburg, VA, on March 9–10, 2026. This will be a 1.5 day in-person symposium, lasting from Monday AM until Tuesday midday. The keynote speaker is Dr. Yong Wang (Washington State University), the recipient of the 2025 Burwell Lectureship in Catalysis; Dr. Wang's lecture is scheduled for Monday, March 9th. We will also have two invited speakers; from outside of the region, Prof. Gina Noh (Penn State) and from the SECS, Emma Hu (Georgia Tech).

Sponsorship at the silver (\$500), gold (\$1000), and platinum (\$1500) levels is still welcome! Contact Tibor Szilvási ([tibor.szilvasi@ua.edu](mailto:tibor.szilvasi@ua.edu)) for more information.

Looking forward to seeing you in March!

**Read More:** <https://nacatsoc.org/>

## Maria Flytzani-Stephanopoulos Symposium on Single-Site Catalysis 2025



Tufts University and the New England Catalysis Society (NECS) hosted the biannual Maria Flytzani-Stephanopoulos Symposium on Single-Site Catalysis in Medford, MA on October 10th. This symposium honors the late Maria Flytzani-Stephanopoulos's contributions to single-atom catalysis and creativity in the field, featuring a keynote lecture from Yong Wang (Washington State University/PNNL) and the 2025 Maria Flytzani-Stephanopoulos Creativity in Catalysis Award lecture from Paul Daunhauer (University of Minnesota).

Additionally, the symposium featured talks from Charlie Sykes (Tufts University), Bin Wang (University of Oklahoma), and Heather Kulik (MIT), a student/postdoc poster competition, and a panel comprising academics and industrial practitioners. For further details, visit: <https://sites.tufts.edu/mfscatalysissymposium/>

Looking forward, NECS is excited to host its next symposium in Spring 2026 at the University of Maine.

**Read More:** <https://nacatsoc.org/>

## Club News

## 30th Biennial Organic Reactions Catalysis Society (ORCS)



Dear Colleagues,

It is my pleasure to announce that abstract submissions for the 2026 Biennial ORCS meeting are open through January 30, 2026, at 11:59 PM Central time. The conference will be held at the Hyatt Regency Sonoma Wine Country, April 12–16th, 2026 in Santa Rosa, CA. There will also be a Student Poster Session this year, along with a poster competition. In addition, travel funds will be available for students and postocs — please take advantage of this opportunity! Abstracts are to be submitted through the website (<https://orcs.org/abstract>) and are to be submitted in the NACS format – the template is available for download on the ORCS website via this link. If you have any questions or have special accommodation or timing requests, please send your emails to [orcschair@orcs.org](mailto:orcschair@orcs.org).

In addition, ORCS is excited to announce their award winners, who will be giving keynotes at our upcoming meeting. Prof. David Flaherty from Georgia Tech will receive the Paul N. Rylander award, established by ORCS in 1988 and sponsored by BASF for scientists who have made outstanding contributions in the field of catalysis as it applies to organic synthesis. Dr. Beata Kilos from The Dow Chemical Company will receive the Murray Raney award, established by ORCS in 1992 and sponsored by Grace Catalysts Technologies to acknowledge contributions in the use of base metal catalysts in organic synthesis. Prof. Quentin Michael from Texas A&M will receive the Robert Augustine Award, established by ORCS in 2017 and sponsored by ACS Journals for significant early career contributions to catalysis of organic reactions of industrial importance.

**Read More:** <https://nacatsoc.org/>

## Tri-State Catalysis Society 2025 Annual Symposium



The Tri-State Catalysis Society hosted the 2025 Annual Symposium in Lexington, Kentucky at the esteemed Campbell House. We had a record number of attendees, who were captivated by the range of Invited, Keynote, and Award presentations. As part of the Symposium, we were delighted to have the 2024 Ciapetta Award winner Aleksey Yezerets present on his impactful work. The meeting featured lively discussions during both poster sessions.

It was great to see so many students attend and present posters at the Symposium. We also had presentations from two student award winners – Anant Sohale and Serra Yesilata. The future is bright for the next generation of Tri-State Catalysis members.

As part of the symposium, the group visited University of Kentucky's Center for Applied Energy Research (CAER), where they are researching sustainable routes to fuels and materials from low-cost and waste feedstocks.

We will be hosting the 2026 Annual Symposium in Cincinnati, Ohio! Be on the lookout for more information.

**Read More:** <https://nacatsoc.org/>

# Club Directory

## Canada Catalysis Division (CCD)

Website: <https://catalysisdivision.ca>

**Chair:** Cathy Chin

*University of Toronto*

**Vice-Chair:** Jan Kopyscinski

*McGill University*

**Past-Chair:** Hui Wang

*University of Saskatchewan*

**Secretary/Treasurer:** Nicolas Abatzoglou

*Université de Sherbrooke*

[nicolas.abatzoglou@usherbrooke.ca](mailto:nicolas.abatzoglou@usherbrooke.ca)

**Member-at-Large:** Cao Thang Dinh

*Queen's University*

**Member-at-Large:** Quan (Sophia) He

*Dalhousie University*

**Member-at-Large:** Drew Higgins

*McMaster University*

**Member-at-Large:** Sami Khan

*Simon Fraser University*

**Member-at-Large:** Chester Upham

*University of British Columbia*

**Member-at-Large (Industrial):** Himanshi

*Dhawan*

*Accelera by Cummins*

**Representative to NACS:** Cathy Chin

*University of Toronto*

## Catalysis Club of Chicago (CCC)

Website: <https://www.catalysisclubchicago.com>

**President:** Siddarth Krishna

*University of Wisconsin, Madison*

**Vice President and Program Chair:** Christo-

*pher Keturakis*

*UOP LLC*

**Secretary and Website Administrator:** Eric R.

*Sacia*

*AbbVie Inc.*

[eric.sacia@abbvie.com](mailto:eric.sacia@abbvie.com)

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*UOP LLC*

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*GTI Energy*

**Director:** Michael Bradford

*GTI Energy*

**Director:** Raj Gounder

*Purdue University*

**Representative to NACS:** Justin Notestein

*Northwestern University*

## Catalysis Club of Philadelphia (CCP)

Website: <https://catalysisclubphilly.org>

**Chair:** Zhuonan (Nick) Song

*W. L. Gore*

**Chair-Elect:** Jinsuo Xu

*Dow Chemical*

**Past Chair:** Angela Zheng

*Johnson Matthey*

**Treasurer:** Steve Hardwick

*W.L. Gore (Retired)*

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*University of Delaware*

[pswan@udel.edu](mailto:pswan@udel.edu)

**Program Chair:** Brandon Bukowski

*Johns Hopkins University*

**Arrangements Chair:** Pedro Antonio Reis Moura

*University of Delaware*

**Director Membership:** Gagandeep Dhillon

*Johnson Matthey*

**Director Poster Session:** Jun Hee Jang

*Rowan University*

**Director Sponsorship:** Feiyang Geng

*Johnson Matthey*

**Website Administrator:** Dang Nguyen

*Lehigh University*

**Representative to NACS:** Dion Vlachos

*University of Delaware*

## Catalysis Society of Metropolitan New York (CSNY)

Website: <https://www.nycsweb.org>

**Chair:** Boris Sheludko

*Amogy*

**Past Chair:** Jihad Dakka

*Retired, ExxonMobil*

**Secretary:** Marcella Lusardi

*Princeton University*

[mlusardi@princeton.edu](mailto:mlusardi@princeton.edu)

**Treasurer:** John F. Brody

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**Director:** Lucas Dorazio

*BASF*

**Director:** Fuat Celik

*Rutgers University*

**Director:** Michele Sarazen

*Princeton University*

**Website Administrator:** Joshua Miller

*Princeton University*

**Student Representative:** Kaitlyn Lawrence

*City University of New York*

**Representative to NACS:** Marco Castaldi

*City University of New York*

## Great Plains Catalysis Society (GPCS)

Website: <https://www.greatplainscatalysis.org>

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*University of Oklahoma*

**President-Elect:** Juan J. Bravo-Suarez

*University of Kansas*

**Past-President:** Jean-Philippe Tessonier

*Iowa State University*

**Secretary:** Juan J. Bravo-Suarez

*University of Kansas*

[jjbravo@ku.edu](mailto:jjbravo@ku.edu)

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*Phillips 66*

**Industrial Liaison:** Clark Miller

*Phillips 66*

**Communications Director:** Ravi Joshi

*Phillips 66*

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**Director:** Bess Vlasisavljevich

*University of Iowa*

**Director:** Kasun Gunasooriya

*University of Oklahoma*

**Director:** Ana Morais

*University of Kansas*

**Director & Webinar Coordinator:** Long Qi

*Iowa State University*

**Webinar Coordinator:** Graham Lief

*Chevron Phillips Chemical (CPChem)*

**Webinar Coordinator:** Rachael Farber

*University of Kansas*

**Mexican Academy of Catalysis (MAC)**Website: <https://www.acat.org.mx>**President:** *Jorge Noé Díaz de León Hernández*  
*UNAM***Vice President:** *Juan Carlos Fierro González*  
*TecNM Celaya***Secretary:** *Diego Daniel González Araiza*  
*UNAM*

araiza@fisica.unam.mx

**Treasurer:** *Carolina Solis Maldonado*  
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*UJAT***Director:** *Raúl Alejandro Luna Sánchez*  
*UV***Director:** *María Guadalupe Cárdenas Galindo*  
*UASLP***Representative to NACS:** *Javier Rivera de la Rosa*  
*Universidad Autónoma de Nuevo León***Michigan Catalysis Society (MCS)**

Website: N/A

**President:** *Victor Sussman*  
*Dow***Vice-President:** *Dong Jiang*  
*Dow***Treasurer:** *Maddie Ball*  
*MSU***Secretary:** *Maddie Ball*  
*MSU*

ballmadl@msu.edu

**Director:** *Beata Kilos*  
*Dow***Director:** *Galen Fisher*  
*UM***Past President::** *Kevin Gu*  
*GM***Representative to NACS:** *Maddie Ball*  
*MSU***New England Catalysis Society (NECS)**Website: <https://necatalysis.org>**Chair:** *Nathaniel Eagan*  
*Tufts University***Vice-Chair:** *Shu Hu*  
*Yale University***Secretary:** *Fanglin Che*  
*WPI*

fche@wpi.edu

**Treasurer:** *Wei Fan*  
*University of Massachusetts***Website Administrator:** *Andrew Peterson*  
*Brown University***Representative to NACS:** *Thomas Schwartz*  
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*University of Maine***Vice-Chair:** *Nathaniel Eagan*  
*Tufts University***Secretary:** *Shu Hu*  
*Yale University*

shu.hu@yale.edu

**Treasurer:** *Wei Fan*  
*University of Massachusetts***Website Administrator:** *Andrew Peterson*  
*Brown University***Representative to NACS:** *Aaron Deskins*  
*Worcester Polytechnic Institute (WPI)***Organic Reaction Catalysis Society (ORCS)**Website: <https://orcs.org>**Chair:** *Radu Craciun*  
*BASF***Past Chair:** *Shingo Watanabe*  
*Linde***Chair Elect:** *TBD***Secretary/Treasurer:** *Pavlo Kostetskyy*  
*Archer Daniels Midland Company*  
Pavlo.kostetskyy@adm.com**Director:** *Bethanie Platt*  
*Archer Daniels Midland Company***Director:** *Nick Brunelli*  
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*University of Virginia***Website Director:** *Eric Sacia*  
*AbbVie***Director of Sponsorship:** *ShaRee Thomas*  
*Evonik***Representative to NACS:** *Karl Albrecht*  
*Archer Daniels Midland Company***Pacific Coast Catalysis Society (PCCS)**

Website: N/A

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*Washington State University (Voiland School of Chemical Engineering and Bioengineering)***Vice-Chair:** *Phillip Christopher*  
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*Washington State University (Voiland School)*  
js.mcewen@wsu.edu**Representative to NACS:** *Alexander Katz*  
*University of California, Berkeley***Pittsburgh, Cleveland Catalysis Society (PCCS)**Website: <https://pccssite.wordpress.com>**President:** *Hilal Ezgi Toraman*  
*Pennsylvania State University***President-Elect:** *Ezra Clark**Department of Energy / Pennsylvania State University***Secretary:** *Li Li*  
*Braskem America Inc.*  
li.li@braskem.com**Treasurer:** *Dominic Alfonso*  
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*University of Pittsburgh***Rocky Mountain Catalysis Society (RMCS)**

Website: N/A

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*Colorado School of Mines***Secretary/Treasurer:** *Nicholas Thornburg*  
*National Renewable Energy Laboratory*  
nicholas.thornburg@nrel.gov**Representative to NACS:** *Adam Holewinski*  
*University of Colorado Boulder***President:** *Nicholas Thornburg*  
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*University of Colorado Boulder***Secretary:** *Houqian Li*  
*New Mexico State University*  
hqli@nmsu.edu**Treasurer:** *Nicholas Jaegers*  
*University of New Mexico***Representative to NACS:** *Michael Nigra*  
*University of Utah***Southeastern Catalysis Society (SECS)**Website: <https://secatsoc.org>**President/Chairperson:** *Tibor Szilvasi*  
*University of Alabama***Past President/Past Chairperson:** *James Har-*

*ris*  
*University of Alabama*  
**Vice-President/President-Elect:** *Guoxiang*  
*(Emma) Hu*  
*Georgia Institute of Technology*  
**Secretary:** *Jason Bates*  
*University of Virginia*  
*jsb9vw@virginia.edu*  
**Treasurer:** *Sreshtha Sinha Majumdar*  
*Oak Ridge National Laboratory*  
**Director:** *Fanxing Li*  
*North Carolina State University*  
**Director:** *John Kuhn*  
*University of South Florida*  
**Communication Manager:** *Md Masudur Rahman*  
*Oak Ridge National Laboratory*  
**Director/Representative to NACS:** *Andreas Heyden*  
*University of South Carolina*

**Southwest Catalysis Society (SWCS)**  
Website: <https://swcatsoc.org>

**Chair:** *Joaquin Resasco*  
*University of Texas at Austin*  
**Chair-Elect:** *Omar Abdelrahman*  
*University of Houston*  
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## Major Meetings

### 2026 Catalysis Gordon Research Conference



**Dates:** June 21–26, 2026

**Location:** New London, New Hampshire

**Website:** <https://www.grc.org/catalysis-conference/2026/>

**Application Deadline:** May 24, 2026

The Catalysis GRC is a premier, international scientific conference focused on advancing the frontiers of science through the presentation of cutting-edge and unpublished research, prioritizing time for discussion after each talk and fostering informal interactions among scientists of all career stages. The conference program includes an array of speakers and discussion leaders from institutions and organizations worldwide, concentrating on the latest developments in the field. The conference is five days long and held in a remote location to increase the sense of camaraderie and create scientific communities, with lasting collaborations and friendships. In addition to premier talks, the conference has designated time for poster sessions from individuals of all career stages, and afternoon free time and communal meals allow for informal networking opportunities with leaders in the field.

Looking ahead, catalysis stands at the forefront of innovation in addressing global challenges associated with energy solutions and chemical manufacturing which are closely tied to population growth and economic development. As catalytic science evolves, it will drive the development of next-generation technologies for the efficient production of energy, chemicals, and fuels. The 2026 Catalysis GRC will delve into the emerging trends and applications in catalysis, highlighting transformative research in both fundamental catalytic principles and their applications. By bringing together leaders from academia, industry, and national laboratories, this conference will serve as a vital platform to identify critical scientific needs, accelerate innovation, and chart a collective vision for the next era of catalysis.

### 30th North American Catalysis Society Meeting (NAM30)



**Dates:** June 13-18, 2027

**Location:** Toronto, Ontario, Canada

**Website:** <https://www.nam30.org/>

The North American Catalysis Society (NACS) Meeting is the largest and most comprehensive catalysis conference in North America, held on a biennial basis and serving as a central forum for the exchange of ideas across the full breadth of catalytic science and engineering. NAM meetings bring together thousands of researchers from academia, industry, and national laboratories, spanning heterogeneous, homogeneous, and biocatalysis, as well as emerging areas at the interface of catalysis with data science, sustainability, and advanced manufacturing.

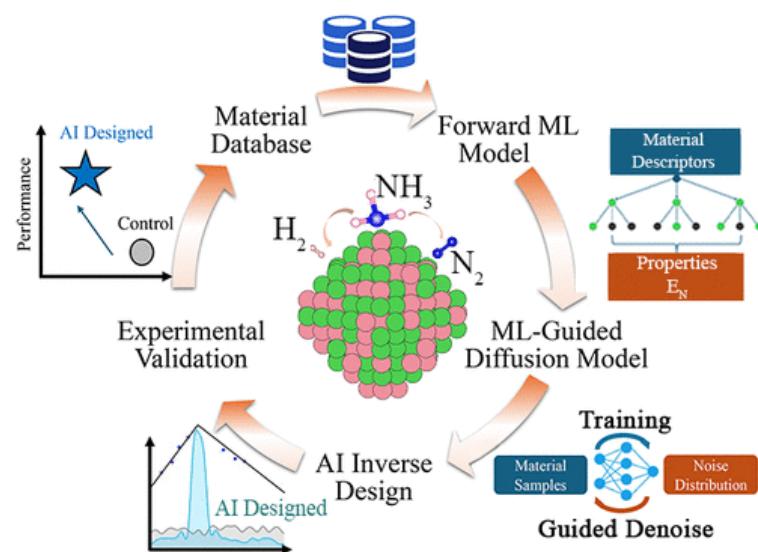
NAM30 will convene the global catalysis community in Toronto, a major international hub for science, technology, and innovation. The meeting will feature a rich technical program including plenary and keynote lectures, parallel technical sessions, poster presentations, and focused symposia organized by the NACS technical divisions. With strong participation from industrial practitioners and early-career researchers alike, NAM30 will provide a uniquely inclusive platform to highlight scientific breakthroughs, foster cross-sector collaboration, and define research priorities that will shape the future of catalysis in energy, chemicals, and environmental technologies.

# Research Highlights

## Diffusion-model inverse design of bimetallic catalysts for low-carbon ammonia decomposition

Yang, J.; Ye, K.; Xie, S.; Li, Q.; Milhans, C.; Liu, F.; Che, F. Diffusion Model-Guided Inverse Design of Bimetallic Catalysts for Ammonia Decomposition. *J. Am. Chem. Soc.* **2025**, ASAP.

DOI: [10.1021/jacs.5c14652](https://doi.org/10.1021/jacs.5c14652)



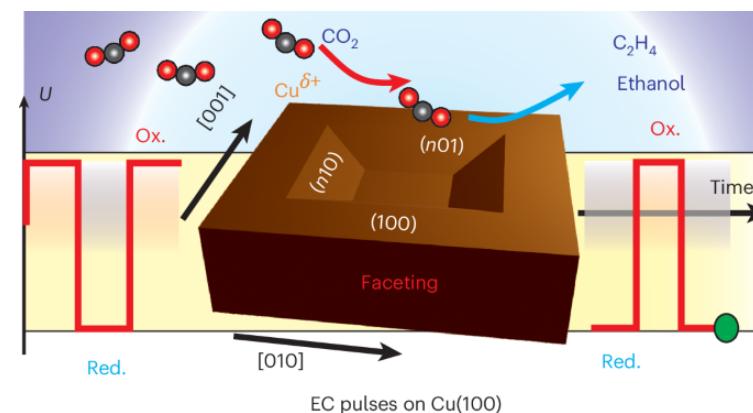
This work presents a machine-learning-guided inverse-design workflow that couples a generative diffusion model with a separate property-prediction model to explore bimetallic alloy catalysts for ammonia decomposition. Candidates are prioritized using nitrogen adsorption energy as a key descriptor motivated by multiscale modeling, enabling efficient navigation of a large compositional space. The authors report that the workflow identifies low-cost bimetallic compositions with strong predicted performance, supported by both theoretical assessment and experimental validation.

**Why It Matters:** Ammonia decomposition is a practical route for on-demand H<sub>2</sub> generation and a pathway for ammonia emissions control; accelerating discovery of inexpensive, non-precious bimetallic catalysts supports scalable hydrogen supply chains with reduced cost and environmental footprint.

## Correlated spectro-microscopy reveals faceting and oxide stabilization during pulsed CO<sub>2</sub> electroreduction on Cu(100)

Tănase, L. C.; Prieto, M. J.; de Souza Caldas, L.; Tiwari, A.; Scholten, F.; Grosse, P.; Martini, A.; Timoshenko, J.; Schmidt, T.; Roldan Cuenya, B. Morphological and chemical state effects in pulsed CO<sub>2</sub> electroreduction on Cu(100) unveiled by correlated spectro-microscopy. *Nat. Catal.* **2025**, *8*, 881–890.

DOI: [10.1038/s41929-025-01387-6](https://doi.org/10.1038/s41929-025-01387-6)



Using concurrently applied spectroscopy, microscopy, and diffraction, the authors resolve how Cu(100) morphology, chemical state, and crystal structure evolve under anodic/cathodic potential pulses during CO<sub>2</sub> electroreduction. Anodic pulses induce the formation of (n10) facets, while alternating anodic-to-cathodic pulsing stabilizes copper-oxide species either at the surface or beneath ultrathin metallic Cu layers depending on

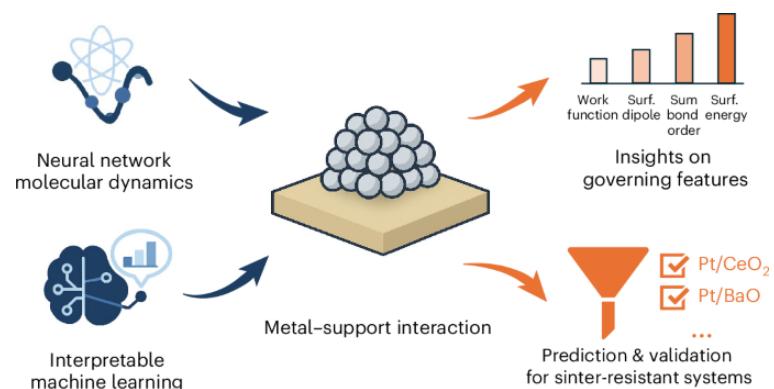
the pulse protocol. These structural and chemical-state changes are linked to the enhanced ethylene and ethanol production reported under pulsed operation.

**Why It Matters:** Mechanistic clarity on pulse-induced restructuring provides actionable design rules for dynamic CO<sub>2</sub> electrolyzers targeting multi-carbon products, supporting carbon utilization and renewable-electricity-to-chemicals pathways.

### Interpretable ML with neural-network MD screens oxide supports to suppress Pt nanoparticle sintering

Jiang, C.; Yan, B.; Goldsmith, B. R.; Linic, S. Predictive model for the discovery of sinter-resistant supports for metallic nanoparticle catalysts by interpretable machine learning. *Nat. Catal.* **2025**, *8*, 1038–1050.

DOI: [10.1038/s41929-025-01417-3](https://doi.org/10.1038/s41929-025-01417-3)



The authors combine first-principles neural-network molecular dynamics with interpretable machine learning to disentangle how oxide-support properties govern Pt nanoparticle metal-support interactions and sintering dynamics. Feature attribution identifies support surface energy, surface oxygen bond order, surface dipole, and work function as dominant descriptors of Pt-oxide interactions. Guided by these descriptors, they screen >10,000 metal-oxide surfaces and validate selected sinter-resistant candidates via Monte Carlo simulations and experiments.

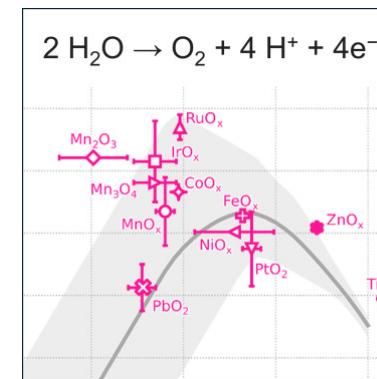
**Why It Matters:** Catalyst sintering is a central industrial deactivation pathway; data-

driven identification of stabilizing supports can extend catalyst lifetimes, reduce precious-metal replacement rates, and improve process uptime in large-scale chemical manufacturing.

### Uncertainty-aware microkinetics identifies robust operating windows for programmable (dynamic) catalysis

Gathmann, S. R.; Jung, S.; Dauenhauer, P. J. Catalytic Resonance Theory for Parametric Uncertainty of Programmable Catalysis. *Chem Catal.* **2025**, *5*, 101523.

DOI: [10.1016/j.checat.2025.101523](https://doi.org/10.1016/j.checat.2025.101523)



The authors quantify how uncertainty in linear scaling and Brønsted–Evans–Polanyi parameters propagates into microkinetic predictions for programmable (dynamically modulated) catalysis. Using Monte Carlo uncertainty propagation and variance-based global sensitivity analysis, they identify which parameters dominate output uncertainty and test whether error-unaware models can still predict near-optimal waveform parameters. Across both a prototype surface reaction and the oxygen evolution reaction, they pinpoint dynamic operating regimes where order-of-magnitude rate enhancement persists despite parameter uncertainty, establishing uncertainty-aware design criteria for dynamic catalysis.

**Why It Matters:** Dynamic catalysis concepts are moving toward experimental implementation; rigorously accounting for parametric uncertainty strengthens the credibility of computational screening and helps define robust, practically reachable operating windows for accelerated electrocatalysis and heterogeneous catalysis under modulation.

# In Memoriam

## Leo E. Manzer (1947–2025)



Leo, age 78, passed away peacefully on the morning of August 10th at home with his wife, two children, and beloved dog, Chloe, by his bedside. Leo was born in 1947 in Timmins, Ontario Canada. He spent his early years moving around in Ontario before his family settled in Niagara Falls. He graduated with an Honors degree in Chemistry from the University of Waterloo and obtained his PhD in chemistry from the University of Western Ontario in 1973.

Upon graduation he was hired by DuPont and joined their Central Research Department at the Experimental Station in Wilmington DE where he began a 32-year career. Leo managed groups doing catalysis and process research and development, retiring at the age of 58 as a DuPont Fellow. After retirement Leo founded Catalytic Insights and worked with over 50 startup companies developing technologies for the conversion of biomass to biofuels and biochemicals. During his consulting and DuPont careers he was the proud inventor of 167 US patents and over 500 foreign patents.

Leo loved the outdoors and after retirement enjoyed his home in Lewes DE where he spent much of his summertime surf fishing

and kayak fishing at Cape Henlopen State Park. It was there that he taught his children and grandchildren to fish and kayak. He also enjoyed fishing and camping with his brother in Northern Ontario for bass, and multiple trips to Kodiak, Alaska, to catch salmon and halibut.

Leo is survived by his wife of 55 years, Margaret, children Joan and Chad, 4 grandchildren and his brother Al.

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